

receptacle is defined by a first thermally conductive wall and a plurality of secondary thermally conductive walls and [is] said medical item support structure is manipulable relative to said housing to facilitate entry and removal of said [corresponding] at least one medical item within said system; a temperature sensor for measuring a temperature of said heating chamber; and a heater for applying heat to said first wall of each said receptacle; wherein said secondary walls of said each receptacle are arranged to conduct heat from the first wall of said each receptacle and distribute said conducted heat about said corresponding medical item contained within that receptacle to heat said corresponding medical item to said desired temperature; and a controller to facilitate entry of said desired temperature for said heating chamber and to control said heater to heat said at least one medical item to said desired temperature in response to said temperature measured by said temperature sensor.

5(Twice Amended). A temperature control system for heating medical items to desired temperatures comprising:

a system housing;

a plurality of heating chambers disposed within said housing each for receiving at least one medical item and heating said at least one medical item to a corresponding desired temperature, wherein said each heating chamber includes:

a medical item support structure to support said at least one medical item within that heating chamber and including at least one receptacle each for receiving a corresponding medical item and heating said corresponding medical item to said corresponding desired temperature, wherein said each receptacle is defined by a first thermally conductive wall and a plurality of

secondary thermally conductive walls;

a temperature sensor for measuring a temperature of that heating chamber; and

a heater for applying heat to said first wall of each said receptacle;

wherein said secondary walls of said each receptacle are arranged to conduct heat from the first wall of said each receptacle and distribute said conducted heat about said corresponding medical item contained within that receptacle to heat said corresponding medical item to said corresponding desired temperature; and

a plurality of controllers each associated with a respective heating chamber to facilitate entry of a desired temperature for that heating chamber and to control said heater of said respective heating chamber to heat at least one medical item contained within that heating chamber to said corresponding desired temperature in response to a temperature measured by said temperature sensor associated with said respective heating chamber.

8(Twice Amended). A temperature control system for heating medical items to desired temperatures comprising:

a system housing;

a plurality of heating chambers disposed within said housing each for receiving at least one medical item and heating said at least one medical item to a corresponding desired temperature, wherein at least two of said heating chambers are associated with different respective desired temperatures and said each heating chamber includes:

a medical item support structure to support said at least one medical item within that heating chamber and including at least one receptacle each for receiving a corresponding medical item and heating said corresponding medical item to said corresponding desired temperature,

11 wherein said each receptacle is defined by a first thermally conductive wall and a plurality of
12 secondary thermally conductive walls;

13 a temperature sensor for measuring a temperature of that heating chamber; and

14 a heater for applying heat to said first wall of each said receptacle;

15 wherein said secondary walls of said each receptacle are arranged to conduct heat
16 from the first wall of said each receptacle and distribute said conducted heat about said
17 corresponding medical item contained within that receptacle to heat said corresponding medical item
18 to said corresponding desired temperature; and

19 a controller to facilitate entry of a desired temperature for each heating chamber and to
20 control said heater of said each heating chamber to heat said at least one medical item contained
21 within that heating chamber to said corresponding desired temperature in response to a temperature
22 measured by said temperature sensor associated with that heating chamber.

1 34(Twice Amended). In a temperature control system having at least one receptacle each for
2 receiving a corresponding medical item, wherein each said receptacle is defined by a plurality of
3 walls and is manipulable relative to [said] a system housing to facilitate entry and removal of said
4 corresponding medical item within said system, a method of heating medical items to a desired
5 temperature comprising the steps of:

6 (a) receiving at least one medical item within said at least one receptacle in response to
7 manipulation of said at least one receptacle relative to said housing; [and]

8 (b) applying heat to a first wall of each said receptacle and conducting said applied heat from
9 said first wall to remaining walls of that receptacle to distribute said conducted heat about a
10 corresponding medical item contained within that receptacle; and

11 (c) controlling said heat applied to said first wall of each said receptacle in accordance with
12 a measured temperature of said at least one receptacle to heat said corresponding medical item to
13 said desired temperature.--